

Mr. Tim Jones
Vulcraft, Division of Nucor Corporation
P.O. Box 1000
St. Joe, Indiana 46785-1000

Re: 033-12721
First Significant Permit Modification to
Part 70 No.: T 033-6286-00027

Dear Mr. Jones:

Vulcraft, Division of Nucor Corporation was issued a permit on December 23, 1997 for a metal fabrication operation. A letter requesting changes to this permit was received on September 18, 2000. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changes in the synthetic minor VOC limit from a 365-day rolling period to a twelve (12) consecutive month rolling period and in the corresponding reporting requirements. In addition, the modification also consists of a changes in the VOC usage record keeping requirement from daily to monthly.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Nysa L. James, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Nysa L. James or extension (3-6875), or dial (317) 233-6875.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

NLJ

cc: File - DeKalb County
U.S. EPA, Region V
DeKalb County Health Department
Northern Regional Office
Air Compliance Section Inspector - Doyle Houser
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

**PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT**

**Vulcraft, A Division of Nucor Corporation
6610 County Road 60
St. Joe, Indiana 46785**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC -13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: T033-6286-00027	
Issued by: Felicia R. George, Assistant Commissioner Office of Air Management	Issuance Date:
First Significant Permit Modification No.: T033-12721	Pages Affected:19 and 25-27
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations [326 IAC 2-7-5(1)]

C.1 PSD Minor Source Status

The volatile organic compounds (VOC) input usage shall be limited to 249 tons per twelve (12) consecutive month period, rolled on a monthly basis. Emissions shall include those emissions from all emission points at the source including those that are insignificant as defined in 326 IAC 2-7(20). Compliance with this condition and all other conditions will make 326 IAC 2-2 , Prevention of Significant Deterioration, and 40 CFR 52.21 not applicable.

C.2 Operation of Equipment [326 IAC 2-7-6(6)]

- (a) All equipment that may emit pollutants into the ambient air shall be properly operated to meet the requirements of this permit.
- (b) Unless otherwise stated in this permit, all air pollution control equipment in this permit shall be operated at all times that the emission unit (s) vented to the control equipment is (are) in operation.
- (c) The Permittee shall perform all necessary maintenance and make all necessary attempts to keep all air pollution control equipment in proper operating condition at all times such that the requirements of this permit are met.

C.3 Opacity

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following:

- (a) Visible emissions shall not exceed an average of forty (40%) opacity in twenty-four (24) consecutive readings,
- (b) Visible emissions shall not exceed sixty (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

C.4 Open Burning

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. This condition is not federally enforceable.

C.5 Fugitive Dust Emissions

The Permittee shall be in violation of 326 IAC 6-4 if any of the criteria specified in 326 IAC 6-4-2 (1) through (4) are violated.

SECTION D.1

FACILITY OPERATION CONDITIONS

- (1) One (1) Super Long Span Line which includes two (2) dip-and-drain paint tanks, and a GMAW welding area. This line is capable of producing 10 tons of metal joists, or trusses per hour.
- (2) One (1) Long Span Line which includes two (2) dip-and-drain paint tanks, and a GMAW welding area. This line is capable of producing 10 tons of metal joists, or trusses per hour.
- (3) One (1) Short Span Line which includes one (1) vacuum-assisted flow coater, and a GMAW welding area. This line is capable of producing 9 tons of metal joists, or trusses per hour.
- (4) One (1) Combination Span Line which includes two (2) dip-and-drain paint tanks, and a GMAW welding area. This line is capable of producing 12 tons of metal joists, or trusses per hour.
- (5) One (1) Bridging Line which includes two (2) dip-and-drain paint tanks, one (1) vacuum coater and a GMAW welding area. This line is capable of producing 10 tons of bridging per hour.
- (6) One (1) Deck Line which include one (1) roll coater and is capable of producing 40 tons of metal decks per hour, and
- (7) One (1) Middle Span Line which includes one (1) vacuum-assisted flow coater, and a welding area. This line is capable of producing 10 tons of metal joists and trusses per hour.

Emission Limitations

D.1.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9] (Miscellaneous Metal Coating)

That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) the volatile organic compounds (VOC) content of the coatings applied to metal trusses and joists fabricated from the Combination Span Line, Super Long Span Line, Long Span Line, Short Span Line and the Bridging Line, Deck Line and the Middle Span Line shall be limited to:

Air Dried and Forced Warm Air Dried Coatings: 3.5 pounds of VOC per gallon of coating less water.

D.1.2 PSD VOC Minor Limit Requirement [326 IAC 2-2] [40 CFR 52.21]

- (a) Pursuant to Construction Permit CP 033-8367, issued on April 18, 1997 that upon the construction of the modification on the Middle Span Line, the plant wide VOC input usage shall be limited to 249 tons per twelve (12) consecutive month period, rolled on a monthly basis. Compliance with this condition shall render the 326 IAC 2-2, the Prevention of Significant Deterioration (PSD) and 40 CFR 52.21 not applicable.

During the first 365 days of operation of the facilities under the modification of the Middle Span Line, the VOC input usage shall be limited such that its total usage divided by the accumulated days of operation shall not exceed 0.68 ton/day.

- (b) After the first 365 days of operation of the facilities under the modification of the Middle Span Line, the VOC input usage from the seven (7) production lines shall be limited such that the VOC emissions will not exceed 249 tons per twelve (12) consecutive month period, rolled on a monthly basis. Compliance with this condition shall render the 326 IAC 2-2, the Prevention of Significant Deterioration (PSD) and 40 CFR 52.21 not applicable.

D.1.3 PSD PM Minor Limitation

Any change or modification which may increase the total potential PM emissions from the welding operation to 250 tons per year must be approved by the Office of Air Management (OAM) and be subject to the requirements of 326 IAC 2-2, the Prevention of Significant Deterioration (PSD) and 40 CFR 52.21. This operation condition also satisfies the requirements of 326 IAC 6-3-2.

Compliance and Testing Requirements [326 IAC 2-7-6(1)]

D.1.4 Testing

There are no testing required for these facilities.

Record keeping and Reporting Requirements [326 IAC 2-7-5(3)]

D.1.5 Volatile Organic Compound (VOC) Usage

The Permittee shall maintain records, in accordance with Section C -General Record Keeping Requirements, of the materials used that contain any VOCs. The record shall be complete and sufficient to establish compliance with the VOC usage limits and/or VOC emission limits established in Condition D.1.2. The records shall contain a minimum of the following:

- (a) The weight of VOC containing material used, including purchase orders and invoices necessary to verify the type and amount used;
- (b) The VOC content (weight percent) of each material used; This will be based upon a Method 24 A test or formulation data, provided that the formulation data is equivalent to a Method 24A test.

To show compliance with Condition D.1.1 (monthly volume-weighted average of all coatings applied in a coating line, lb/gallon less water) the record keeping requirement is as follows: monthly usage of VOC content of each coating shall be maintained and made available upon request.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

Part 70 Permit Quarterly Report

Source Name: Vulcraft, A Division of Nucor Corporation
Source Address: 6610 County Road 60, St. Joe, Indiana 46785
Part 70 Permit No.: T033-6286-00027
Facility: Plant wide
Parameter: Volatile Organic Compounds
Limit: The VOC input usage from all the production lines shall be limited to 249 tons per twelve (12) consecutive month period, rolled on a monthly basis.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Vulcraft, Division of Nucor Corporation
Source Location:	6640 County Road 60, St. Joe, Indiana 46785
County:	DeKalb
SIC Code:	3441 and 3444
Operation Permit No.:	T 033-6286-00027
Operation Permit Issuance Date:	December 23, 1997
Significant Permit Modification No.:	T 033-12721-00027
Permit Reviewer:	Nysa L. James

The Office of Air Management (OAM) has reviewed a modification application from Vulcraft, Division of Nucor Corporation relating to the operation of metal fabrication operation.

History

On September, 18, 2000, Vulcraft, Division of Nucor Corporation submitted an application to the OAM requesting the relation of the plant. Vulcraft, Division of Nucor Corporation was issued a Part 70 permit on December 23, 1997.

Existing Approvals

The source was issued a Part 70 Operating Permit (T033-6286-00027) on December 23, 1997.

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(d)(1).

Recommendation

The staff recommends to the Commissioner that the First Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 18, 2000.

Changes Proposed

The Office of Air Management (OAM) has reviewed an application from Vulcraft, Division of Nucor Corporation, relating to a permit modification to their existing Part 70 Operating Permit.

The significant permit modification consists of relaxing the record keeping and reporting requirements for Condition D.1.2, from a 365 day rolling period to a 12-month rolling period. In addition the source also requests that the VOC usage record keeping requirements for Condition D.1.1, be relaxed from daily to monthly. The source is proposing the following changes (changes are bolded and stricken out for emphasis):

1. Condition C.1, PSD Minor Source Status listed on page 19 of 30, is revised to reflect the relaxation of the time period for the source's PSD minor synthetic limit. The revision is as follows (changes are crossed out and bolded for emphasis):

C.1 PSD Minor Source Status

The volatile organic compounds (VOC) input usage shall be limited to 249 tons per ~~365 days rolled on a daily basis~~ **twelve (12) consecutive month period, rolled on a monthly basis**. Emissions shall include those emissions from all emission points at the source including those that are insignificant as defined in 326 IAC 2-7(20). Compliance with this condition and all other conditions will make 326 IAC 2-2, Prevention of Significant Deterioration, and 40 CFR 52.21 not applicable.

2. Condition D.1.2, PSD Minor Limit Requirement listed on pages 25 and 26 of 30, is revised to reflect the relaxation of the time period for the source's PSD minor synthetic limit. The revision is as follows (changes are crossed out and bolded for emphasis):

D.1.2 PSD VOC Minor Limit Requirement [326 IAC 2-2] [40 CFR 52.21]

- (a) Pursuant to Construction Permit CP 033-8367, issued on April 18, 1997 that upon the construction of the modification on the Middle Span Line, the plant wide VOC input usage shall be limited to 249 tons per ~~365 day total rolled on a daily basis~~ **twelve (12) consecutive month period, rolled on a monthly basis**. Compliance with this condition shall render the 326 IAC 2-2, the Prevention of Significant Deterioration (PSD) and 40 CFR 52.21 not applicable.

During the first 365 days of operation of the facilities under the modification of the Middle Span Line, the VOC input usage shall be limited such that its total usage divided by the accumulated days of operation shall not exceed 0.68 ton/day.

- (b) After the first 365 days of operation of the facilities under the modification of the Middle Span Line, the VOC input usage from the seven (7) production lines shall be limited such that the VOC emissions will not exceed 249 tons per year, rolled on a ~~daily~~ **monthly** basis. Compliance with this condition shall render the 326 IAC 2-2, the Prevention of Significant Deterioration (PSD) and 40 CFR 52.21 not applicable.

3. Condition D.1.5, Volatile Organic Compound (VOC) Usage listed on page 26 of 30, is revised to reflect the relaxation of the record keeping requirements for Condition D.1.1, from daily to monthly. Rule 326 IAC 8-1-2(a)(10) allows for monthly 326 IAC 8-2-9 compliance method. The revision is as follows (changes are crossed out and bolded for emphasis):

D.1.5 Volatile Organic Compound (VOC) Usage

The Permittee shall maintain records, in accordance with Section C -General Record Keeping Requirements, of the materials used that contain any VOCs. The record shall be complete and sufficient to establish compliance with the VOC usage limits and/or VOC emission limits established in Condition D.1.2. The records shall contain a minimum of the following:

- (a) The weight of VOC containing material used, including purchase orders and invoices necessary to verify the type and amount used;
- (b) The VOC content (weight percent) of each material used; This will be based upon a Method 24 A test or formulation data, provided that the formulation data is equivalent to a Method 24A test.

To show compliance with Condition D.1.1 (~~daily~~ **monthly** volume-weighted average of all coatings applied in a coating line, lb/gallon less water) the record keeping requirement is as follows: ~~daily~~ **monthly** usage of VOC content of each coating shall be maintained and made available upon request.

- 4. The Quarterly Report Form, listed on page 27 of 30, is revised to reflect the relaxation of the time period for the source's PSD minor synthetic limit. The time period is changed from 365 day total rolled daily to twelve (12) consecutive month period, rolled on a monthly basis.

Potential To Emit

Since this modification involves only a relaxation to the monitoring and record keeping requirements, there is no increase in the potential to emit.

County Attainment Status

The source is located in DeKalb County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. DeKalb County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

There are no changes in Federal rule applicability from the original Part 70 Operating Permit.

State Rule Applicability - Entire Source

There are no changes in Federal rule applicability from the original Part 70 Operating Permit.

Compliance Requirements

There are no changes in the Compliance Requirements from the original Part 70 Operating Permit.

Conclusion

The operation of this metal fabrication operation shall be subject to the conditions of the attached proposed **First Significant Permit Modification No. T 003-12721-00027**.